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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,721	01/12/2001	Yeong-Taeg Kim	SAM1.0082	2444

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EXAMINER
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BELIVEAU, SCOTT E

ART UNIT	PAPER NUMBER
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2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/759,721	KIM, YEONG-TAEG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Scott Beliveau	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15, 28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 November 2006 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 20 November 2006 have been fully considered but they are not persuasive.

Applicant's arguments appear to be substantially the same as those previously addressed in the Final Rejection mailed on 16 August 2006 and the Non-Final Rejection mailed on 27 April 2006. Given that these arguments have already been presented and addressed, applicants are respectfully referred to the previous response.

Regarding applicant's newly presented arguments (Section A) that not only does Butler teach away from a modification to its 'controller' but that there is also no suggestion or motivation to modify Butler to comprise a 'controller' that that displays banner information upon user permission only, as claimed, the examiner continues to respectfully disagree. The examiner recognizes that a prior art reference that "teaches away" from the claimed invention is a significant factor to be considered in determining obviousness; however, "the nature of

the teaching is highly relevant and must be weighed in substance”. In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). In support of the position that Butler teaches away, the applicants note that Butler discloses that ‘control data is provided to indicate when the overlays should be rendered and to provide other instructions on how the HTML files should be handled by the receiving equipment’ (e.g. Abstract, Para. [0055]). As discussed in greater detail, the ‘control data’ is associated with timing information (ex. when to synchronously display the overlay) and what to do with the overlays (Para. [0058]).

Conspicuously absent from these passages, however, is any statement or teaching that these overlays must not or should not be temporarily disabled. Therefore, the particular argument that Butler teaches away from any modification to allow for the temporary disabling/enabling display of the overlays is not persuasive.

Regarding applicant’s newly presented arguments that Watts teaches away from using MPEG because of its disclosed usage of the VBI, the examiner respectfully disagrees. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Watts also teaches that the supplementary data can be received from any of a wide range of external sources including digital satellite system providers, digital cable provides, digital broadcast providers (Col.2, Line 64 – Col 3, Line 3; Col 4, Lines 35-36). The usage of MPEG-2 in conjunction with digital broadcasts is commonly known in the art (IA: Page 2, Lines 7-12). Therefore, the reference does not ‘teach away’ from the particular usage of MPEG.

As to the further arguments that Butler 'teaches away' from Watts because Butler is directed towards the particular usage of conventional PC hardware contrary to the usage of specialized unconventional hardware of Watts, the examiner respectfully disagrees. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Watts provides no teaching which would suggest that it cannot be implemented using the Butler hardware and further explicitly teaches that the invention can be implemented using a 'convergence system' or personal computer integrated with broadcast functionality (Col 9, Lines 50-58) personal computer. Therefore, applicant's arguments regarding the disclosed physical embodiment of Butler 'teaching away' from Watts is not persuasive.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 9, 12, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler (US Pub No. 2002/0007493 A1) in view of Watts et al. (US Pat No. 6,324,694 B1).

In consideration of claim 1, Figure 1 of the Butler et al. reference illustrates a “digital video service network” [10] comprising a “means for providing a combined digital signal” [12] having “information reflective of a regular program signal” and a “Banner Information signal” or ancillary data in the form of HTML advertisement overlays (Para. [0004], [0015], and [0020]) via a “channel communicating the combined digital signal from the means for providing a combined digital signal to the receiver” (Para. [0013]). The aforementioned, “combined digital signal” is subsequently “received” via a “specialized receiver” particular configured to receive MPEG encoded digital broadcasts (Para. [0032]) with an associated “presentation unit” or display [68] which “presents . . . the Banner Information . . . with the regular program” (Para. [0004] and [0036]).

With respect to the limitation pertaining to the usage of a “controller”, the Butler et al. reference comprises a “controller” [52] that “controls the presentation unit to display the Banner Information with the regular program”, however the reference is silent with respect to such being performed “upon permission only”. In an analogous art pertaining to interactive distribution systems, the Watts et al. reference discloses a method for distributing video programming and supplemental content including a “controller” [141] that “controls the presentation unit to display [the supplemental content] with the regular program upon permission only” (Watts et al.: Col 2, Line 63 – Col 4, Line 35; Col 5, Lines 28-33; Col 8, Lines 17-29; Col 9, Lines 31-38). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify Butler et al. so as to further provide the ability for the user so as to enable/disable or to give “permission” to display received supplemental content or “Banner Information” for commonly known

advantage of providing the user with improved flexibility with respect to the presentation of supplemental information. For example, such a means may advantageously provide the user with the ability to turn-off “Banner Information” or supplemental content should they desire not to be bothered by such pop-up information.

In consideration of claim 9, Figure 4 of the Butler et al. reference discloses a “method for providing digital television programming to viewers” comprising “creating a combined digital television signal which combines information reflective of regular programming” [220] and “information reflective of Banner Information” [226] which is subsequently “transmitted . . . over a channel” (Para. [0013] and [0050] – [0053]). The aforementioned “transmitted, combined digital signal” is subsequently “received” [230] at a “receiver” [14] (Figure 5) and are “provided to a presentation unit” [68] such that the “information reflective of the regular programming and the information reflective of the Banner Information are displayed simultaneously on the presentation unit” (Para. [0004] and [0036]).

With respect to the limitation pertaining to the usage of a “controller”, the Butler et al. reference comprises a “controller” [52] that “controls the presentation unit to display the Banner Information with the regular program”, however the reference is silent with respect to such being performed “upon permission only”. In an analogous art pertaining to interactive distribution systems, the Watts et al. reference discloses a method for distributing video programming and supplemental content including a “controller” [141] that “controls the presentation unit to display [the supplemental content] with the regular program upon permission only” (Watts et al.: Col 2, Line 63 – Col 4, Line 35; Col 5, Lines 28-33; Col 8, Lines 17-29; Col 9, Lines 31-38). Accordingly, it would have been obvious to one having

ordinary skill in the art at the time the invention was made so as to modify Butler et al. so as to further provide the ability for the user so as to enable/disable or to give "permission" to display received supplemental content or "Banner Information" for commonly known advantage of providing the user with improved flexibility with respect to the presentation of supplemental information. For example, such a means may advantageously provide the user with the ability to turn-off "Banner Information" or supplemental content should they desire not to be bothered by such pop-up information.

Claim 12 is rejected wherein the user is "provided a receiver . . . which specifically enables the simultaneously display of the Banner Information and the regular programming on the presentation unit" in connection with the necessary hardware to receive and decode DBS signals (Para. [0002]). As aforementioned, in light of the combined references the "provided receiver" further "allows the controlling the presentation unit to display the Banner Information with the regular program only upon permission" (Watts et al.: Col 8, Lines 17-29; Col 9, Lines 31-38).

Claim 28 is rejected in light of the Watts et al. reference wherein the "permission" is implicitly "provided by a user who is a viewer of the regular program" (Watts et al.: Col 8, Lines 17-29) given that the user is equated with being a viewer of television programming.

Claim 29 is rejected in wherein "if there is no permission the controller controls the presentation unit to display the regular program without the Banner Information" (Col 9, Lines 32-39).



5. Claims 2-8 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. (US Pub No. 2002/0007493 A1) in view of applicant's admitted prior art (APA) relating to the MPEG-2 Standard.

In consideration of claim 2, the Butler et al. reference discloses that the "regular program and the Banner Information are synchronized" (Para. [0043]) as well as the particular usage of MPEG-2 in connection with the "providing" / distribution [12] of the combined digital signal (Para. [0015]). The reference, however, does not explicitly disclose details associated with the implementation of the standard including the creation of a "TS packetized" stream. Applicant's admitted prior art discloses that the particular usage of TS packetization as defined in the MPEG-2 Standard is well known in the art (IA: Page 18, Lines 18-20). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to "create a TS packetized combined digital signal" in connection with complying with the MPEG-2 standard for the commonly known advantages associated with such including providing for consistent and uniform digital video signal sampling, coding, transmission and reception of programs along with audio and video overlays (IA: Page 2, Line 16 – Page 3, Line 8) in a manner that provides the robustness necessary for noisy channel distribution such as those employed by satellite distribution (Introduction – PART 1 Systems).

In consideration of claims 3 and 15, as aforementioned, the Butler et al. reference particularly discloses the usage of the MPEG-2 in connection with the distribution of a multiplexed digital signal. The reference, however, does not particularly disclose the details pertaining to the construction of a TS in accordance with the MPEG-2 standard (Para

[0015]). Applicant's admitted prior art discloses that the MPEG-2 standard discloses details pertaining to the packetizing, multiplexing and sending of coded bit streams of multiple programs wherein multiple programs with audio and video overlays may be transmitted by a service provider and received by the end user (IA: Page 3, Lines 4-10). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to particularly utilize "a first coding unit for coding the regular program signal and a second coding unit for coding the Banner Information signal, a first TS packetization unit for receiving the coded regular program signal and providing a packetized bit stream reflecting the coded regular program signal and a second TS packetization unit for receiving the coded Banner Information signal and providing a packetized bit stream reflecting the coded Banner Information signal, a TS Packet multiplexer for receiving the packetized regular program signal and the packetized Banner Information signal and providing a multiplexed transport stream" for the purpose of providing a means so as to facilitate the encoding, packetizing, multiplexing, and providing of an MPEG-2 TS in accordance with the MPEG-2 standard and the associated inherent advantages associated with such including the ability to distribute multiple programs along with audio and video overlays with improved error resilience plus the ability to carry these programs simultaneously without requiring a common time base.

With respect to the particular limitation of a "channel modulation unit for modulating the transport stream into the combined digital signal and sending the combined digital signal for transmission to the channel", the Butler et al. reference requires the particular usage of such given that the receiver utilizes a particular channel for the reception of the combined stream (Para. [0032]) and the source distributes the content over a particular channel (Para. [0013]).

Further evidence is provided in light of co-pending application no. 08/503,055 (hereafter, Newell et al.) explicitly incorporated by reference which illustrates the particular usage of QPSK modulation [47] in association with the received signal (Figures 3 A/B).

In consideration of claims 4-7, 13, and 14, as aforementioned the Butler et al. reference discloses the particular usage of the MPEG-2 standard in connection with the processing of the received data wherein the particular utilization of a "TS packetized" streams in accordance with the standard would have been an obvious modification in order to provide the robustness necessary for noisy channels distribution channels such as those employed by satellite distribution. As illustrated in Figure 2, the "receiver" [14] is and "comprises a specialized receiver" for the reception and processing of digital television signals alongside 'Banner Information' that further implicitly employs the claimed means for the purpose of demodulating, demultiplexing, depacketizing, decoding, and rendering an MPEG-2 packetized TS for the purpose of rendering the received MPEG-2 TS in accordance with the MPEG-2 standard. In particular, as further illustrated in Figures 3/A and 4 of the incorporated Newell et al. reference, the receiver comprises a "channel demodulation unit for demodulating the received combined digital signal and extracting bit streams of the regular program signal and the Banner Information signal from a user-tuned channel" [47], "a TS demultiplexing unit for demultiplexing the regular program bitstream and Banner Information TS packets from the signal received from the channel demodulation unit" [45/45'], "a Banner Information TS depacketizer for receiving the Banner Information TS packets from the TS demultiplexing unit and depacketizing the Banner Information TS packets to provide a coded Banner Information signal" [45/45'], "a Rendering Unit for

decoding and rendering the coded Banner Information into a bitmap video signal” [94], “a video reconstruction unit for receiving the rendered Information bitmap video signal and creating an output for the presentation device” [92], “Audio/video decoders for receiving the regular program bitstream from the TS demultiplexing unit . . . decoding audio and video coded bit streams of the regular program signal . . . [and] sending an Audio output signal for transducing into sound and a decoded video signal to the video reconstruction unit” [94/98], “the video reconstruction unit reconstructing an output video signal from the decoded video output and the rendered Banner Information bitmap video signal . . . [and] sending the video output signal . . . to the video presentation device” [46] for “display where the regular program and the Banner Information are displayed simultaneously” (Butler et al.: Para. [0032] – [0039]).

In consideration of claim 8, the claimed limitation do not set forth any over and above those addressed in the combined rejections of claims 1, 3, and 4 and is accordingly rejected as previously set forth. In particular, Figure 1 of Butler et al. illustrates a “digital video service network” [10] comprising a “means for providing” [12], a “receiver” [14], and a “channel for communicating the combined digital signal from the means for providing” (Para. [0013]). As aforementioned, while Butler et al. provides a “controller” [52] that “controls the video reconstruction unit to display the Banner Information with the regular program”, the reference is silent with respect to such being performed “upon permission only”. In an analogous art pertaining to interactive distribution systems, the Watts et al. reference discloses a method for distributing a “combined digital signal having information reflective of a regular program signal and a Banner Information signal” including a

“controller” [141] that “controls the video reconstruction unit to display the Banner Information with the regular program upon permission only” (Watts et al.: Col 2, Line 63 – Col 4, Line 35; Col 5, Lines 28-33; Col 8, Lines 17-29; Col 9, Lines 31-38). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify Butler et al. so as to further provide the ability for the user so as to enable/disable or to give “permission” to display received supplemental content for commonly known advantage of providing the user with improved flexibility with respect to the presentation of supplemental information. For example, such a means may advantageously provide the user with the ability to turn-off “Banner Information” or supplemental content should they desire not to be bothered by such pop-up information.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. (US Pub No. 2002/0007493 A1) in view of applicant’s admission of fact (AAF).

In consideration of claims 10 and 11, the Butler et al. reference does not explicitly disclose the particular usage of “entering into an agreement with end-users which allows for” the aforementioned “simultaneous display of the Banner Information and the regular programming on the presentation unit” wherein “the agreement provides for a limitation on the subscription charged to the end user. Applicant’s admission of fact provides evidence as to the existence of service agreements (ex. quarterly/monthly/yearly subscriptions) that “allow” viewers to watch distributed programming and “provide for a limitation on the subscription charged to the end user” as being notoriously well known in the art of video distribution (ex. IA: Page 3, Lines 14-17). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Butler et al. so

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as to employ the aforementioned service agreements for the inherent advantages associated with such including the ability of the service provider to profit or recoup costs associated with the distribution of video programming.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 571-272-7343.

The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SEB  
January 16, 2007

Scott Beliveau  
Primary Examiner  
Art Unit 2623